

CLAIMS

What is claimed is:

1. A burr hole plug, comprising:
 - a shell capable of being inserted in a burr hole of a skull;
 - a collet capable of interlocking with the shell and securing a medical device within the shell when the collet is compressed;
 - a clamp capable of interlocking with the shell and compressing the collet; and
 - a cover capable of covering the shell, collet, and clamp.
2. The plug of Claim 1, wherein the shell further comprises a body and a flange along a top opening of the shell body and wherein the body of the shell defines a side slot along the full length of the body of the shell.
3. The plug of Claim 2, wherein the body of the shell includes an exterior surface with a fixation means.
4. The plug of Claim 2, wherein the flange includes a medical device exit.
5. The plug of Claim 2, wherein the flange includes an anchor for attaching the shell to the skull.
6. The plug of Claim 1, wherein the clamp includes a side slot along the full length of the clamp.

7. The plug of claim 1, wherein the collet includes a side slot along the full length of the collet.

8. The plug of Claim 1, wherein the cover further comprises an anchor to attach the cover to the skull.

9. The plug of Claim 1, wherein the cover and flange of the shell are attached to each other using an anchoring arrangement, wherein the anchoring arrangement is selected from the group consisting of at least one screw and corresponding hole, at least one button that snaps into a corresponding hole, or at least one ball that friction fits into a corresponding socket.

10. The plug of Claim 1, wherein the collet includes an apex and wherein at least one compressible soft cushion is attached to the collet at the apex of the collet.

11. The plug of Claim 1, wherein the collet includes a body including an internal conical shape.

12. The plug of Claim 1, wherein the collet includes a body including an external conical shape.

13. The plug of Claim 12, wherein the clamp includes a body including an internal conical shape that is adapted to engage with the external conical shape of the body of the collet.

14. The plug of Claim 1, wherein the shell includes at least two interlocking slots and the clamp includes a body that includes at least two externally protruding pins, which pins are adapted to engage with the interlocking slots of the shell.

15. The plug of Claim 1, wherein the shell includes a body with a locking base and the collet includes a body with a locking base adapted to interlock with the locking base of the shell.

16. The plug of Claim 1, wherein the collet includes at least one slot adapted to engage with an insertion tool and wherein the clamp includes at least one hole adapted to engage with an insertion tool.

17. The plug of Claim 1, wherein the shell and the collet are integrated to form a shell-collet.

18. The plug of Claim 1, wherein the collet and the clamp are integrated to form a collet-clamp.

19. An insertion tool for use with a burr hole plug including a clamp and a collet, wherein the insertion tool comprises:

- a cylindrical body;
- at least one pin adapted to engage with at least one hole of the burr hole plug clamp;
- at least one rib adapted to engage with at least one slot of the burr hole plug collet;
- wherein the insertion tool includes a side slot along the entire body length of the insertion tool; and
- wherein the interior surface of the cylindrical body near the at least one rib includes a conical surface.

20. A method for implanting a plug in a burr hole into which a medical device is inserted, comprising the steps of:

- placing a shell into a burr hole;
- inserting a collet into the shell;
- interlocking the collet with the shell;
- inserting a clamp into the shell;
- interlocking the clamp and the shell while compressing the collet around a medical device with the clamp; and
- covering the burr hole with a cover.